

DOCKET: CU-2845

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Atsushi HAYAKAWA et al.)
SERIAL NO: 10/074,359) Group Art Unit: 1744
FILED: February 12, 2002) Examiner: Elizabeth L. McKane
TITLE: METHOD OF STERILIZATION FOR CONTAINER, APPARATUS
USING THEREFOR, AND HEAT TREATMENT FOR CONTAINER

AMENDED CLAIMS

1-18. (cancelled)

19. (new) A method for sterilizing a bottle comprising the following steps in sequence:

a) preheating the bottle to a temperature of at least 40°C, wherein the step of preheating comprises the steps of

i) preheating the entire bottle from a first source applying heat to the interior of the bottle, and

ii) separately preheating the neck portion of the bottle by applying heat from a second source to an exterior surface of the neck portion;

b) supplying a disinfectant mist to the interior of the bottle;

c) heating the bottle into which the disinfectant mist has been supplied;

d) discharging the disinfectant mist from the bottle; and

d) rinsing the inside of the bottle after discharging the disinfectant mist therefrom.

20. (new) The method as claimed in claim 19, further comprising providing a predetermined waiting period between the steps of supplying the disinfectant mist to the bottle and discharging the disinfectant mist from the bottle.

21. (new) The method as claimed in claim 19, further comprising providing a predetermined waiting period between the steps of discharging the disinfectant mist from the bottle and rinsing the inside of the bottle.

22. (new) The method as claimed in claim 19, wherein a blast of hot air is supplied into the bottle into which the mist has been supplied so as to achieve both the heating of the bottle and the discharging of the disinfectant mist.

23. (new) The method as claimed in claim 19, wherein the step of rinsing the inside of the bottle comprises supplying a heated rinsing fluid into the bottle.

24. (new) The method as claimed in claim 19, wherein the step of preheating the bottle comprises supplying a hot air blast from the first and second sources of heat.